

THIS REPORT HAS BEEN DELIMITED  
AND CLEARED FOR PUBLIC RELEASE  
UNDER DOD DIRECTIVE 5200.20 AND  
NO RESTRICTIONS ARE IMPOSED UPON  
ITS USE AND DISCLOSURE.

**DISTRIBUTION STATEMENT A**

APPROVED FOR PUBLIC RELEASE,  
DISTRIBUTION UNLIMITED.

# UNCLASSIFIED

# AD 112883

## Armed Services Technical Information Agency

Reproduced by

**DOCUMENT SERVICE CENTER**

**KNOTT BUILDING, DAYTON, 2, OHIO**

This document is the property of the United States Government. It is furnished for the duration of the contract and shall be returned when no longer required, or upon recall by ASTIA to the following address: Armed Services Technical Information Agency, Document Service Center, Knott Building, Dayton 2, Ohio.

**NOTICE: WHEN GOVERNMENT OR OTHER DRAWINGS, SPECIFICATIONS OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE U. S. GOVERNMENT THEREBY INCURS NO RESPONSIBILITY, NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY ANY PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE OR USE OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.**

# UNCLASSIFIED

PRINCETON UNIVERSITY  
PRINCETON, NEW JERSEY  
SCHOOL OF ENGINEERING, JOHN C. GREEN FOUNDATION

DEPARTMENT OF AERONAUTICAL ENGINEERING  
THE JAMES FORRESTAL RESEARCH CENTER

January 4, 1956

**FC**

To: Commanding Officer  
Office of Naval Research  
Air Branch/ Code 461  
Department of the Navy  
Washington 25, D. C.

Subject: Tandem Helicopter Stability Program, Status Report for  
the month of December, 1955.

Contract N6 onr-27024

Flight Test Operations:

Calibration of the revised instrumentation system is underway. Various breakdowns of assorted electronic components have delayed this work, but it is expected that it will shortly be completed and data flights resumed.

While we achieved acceptable success for the longitudinal investigations experience suggested improvements of the entire system and these have been incorporated during the required changes for lateral stability analysis. Unfortunately an unusual amount of small, but vital, electrical troubles have plagued the conversion. Furthermore, the nature of the troubles is such that only one technician can be employed because of space limitations of the helicopter. This man has been, and continues, on overtime status.

Theoretical Analysis:

The work of resolving the discrepancy between flight measured control and theoretical responses, as mentioned in the December report, is

ASTIA FILE COPY

112 883

- 2 -

continuing as are the theoretical studies for the lateral stability cases.

Very truly yours,



LEONARD GOLAND  
Chief Project Engineer

LG/nt  
cc:

- 3 - Commanding Officer, ONR, Wash.
- 1 - Lcdr. A. D. Struble
- 1 - J. Levy, ONR, N. Y.
- 1 - Special Devices Center - Code 910
- 1 - R. Booth, DE 31, BuAer
- 8 - Office Chief of Trans. Dept. of the Army
- 1 - Asst. Chief of Staff, G-4, R & D
- 1 - Commanding General, Fort Monroe, Virginia ATDEV-6
- 1 - David Taylor Model Basin, Maryland - Code 634
- 1 - President, Board No. 6, CONARC, Camp Rucker, Alabama

# UNCLASSIFIED

# AD 112883

## Armed Services Technical Information Agency

Reproduced by

**DOCUMENT SERVICE CENTER**

**KNOTT BUILDING, DAYTON, 2, OHIO**

This document is the property of the United States Government. It is furnished for the duration of the contract and shall be returned when no longer required, or upon recall by ASTIA to the following address: Armed Services Technical Information Agency, Document Service Center, Knott Building, Dayton 2, Ohio.

**NOTICE: WHEN GOVERNMENT OR OTHER DRAWINGS, SPECIFICATIONS OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE U. S. GOVERNMENT THEREBY INCURS NO RESPONSIBILITY, NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE OR USE OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.**

# UNCLASSIFIED